10

25

30

## **CLAIMS**

- 1. A cooler apparatus providing storage and insulation to hot or cold items, the cooler apparatus comprising:
  - a main body having a base and sidewalls;
- a storage cavity defined in the main body and having an open end; and a lid coupled to the main body and movable with respect to the main body between a first position in which the lid substantially covers the open end of the storage cavity and a second position in which the lid does not substantially cover the open end of the storage cavity, the lid positioned substantially horizontally in movement between the first position and the second position.
- 2. The cooler apparatus set forth in claim 1, further comprising at least one of a cup holder and a tray defined in an upper surface of the lid.
- 3. The cooler apparatus set forth in claim 2, wherein a first portion of the lid is positioned adjacent an upper end of at least one sidewall of the main body when the lid is in the second position, and wherein at least one of the cup holder and the tray are at least partially defined in the first portion of the lid such that articles placed in at least one of the cup holder and tray can be at least partially supported by the at least one sidewall of the main body.
  - 4. The cooler apparatus set forth in claim 1, further comprising at least one arm positioned to couple the lid to the main body, the arm including a first portion positioned adjacent the lid and a second portion positioned adjacent the main body.
  - 5. The cooler apparatus set forth in claim 4, wherein the first portion of the arm is rotatable about a first axis, the second portion of the arm is rotatable about a second axis, and the second portion of the arm is revolvable about the first axis as the lid is moved between the first position and the second position.
  - 6. The cooler apparatus set forth in claim 4, wherein the at least one arm includes four arms arranged in two sets of two parallel arms, one set of parallel arms being located on an opposite side of the cooler from the other.

7. The cooler apparatus set forth in claim 1, further comprising a handle rotatable about an axis and lockable in at least two positions, the handle comprising a first portion pivotally secured to the main body of the cooler and a second portion adapted to be grasped by a user.

5

8. The cooler apparatus set forth in claim 7, wherein the handle is lockable in a first position in which the second portion of the handle is upright and a second position in which the second portion of the handle is adjacent the base of the main body of the cooler.

10

- 9. The cooler apparatus set forth in claim 8, wherein the handle is lockable in the second position to support the lid when the lid is in the second position.
- 10. The cooler apparatus set forth in claim 1, further comprising at least one drawer, the drawer being defined in at least one of the lid and the main body of the cooler.
  - 11. The cooler apparatus set forth in claim 10, wherein the drawer is defined in the main body of the cooler and separate from the storage cavity.
- 20 12. A cooler apparatus for storing and insulating hot or cold items, the cooler apparatus comprising:
  - a main body comprising a base and sidewalls;
  - a storage cavity defined in the main body and having an open end; and
  - a lid coupled to the main body and movable between a first position in which the lid substantially covers the open end of the storage cavity and a second position in which the lid does not substantially cover the open end of the storage cavity; and

an arm positioned to couple the lid to the main body, the arm comprising a first portion pivotally coupled to the main body and rotatable about a first axis and a second portion pivotally coupled to the lid and rotatable about a second axis.

30

25

13. The cooler apparatus set forth in claim 12, wherein the lid remains substantially horizontal during movement between the first position and the second position.

WO 2004/062394 PCT/US2004/000052

- 14. The cooler apparatus set forth in claim 12, wherein the second portion of the arm revolves about the first axis when the lid is moved between the first position and the second position.
- 5 15. The cooler apparatus set forth in claim 12, wherein the arm is one of four arms arranged in two sets of two parallel arms.
- 16. The cooler apparatus set forth in claim 12, further comprising at least one of a cup holder, a tray, a coin holder, and a utensil holder defined in an upper surface of the lid.
  - 17. The cooler apparatus set forth in claim 12, further comprising at least one drawer defined in at least one of the lid and the main body.
- 18. The cooler apparatus set forth in claim 12, further comprising a handle coupled to the main body and rotatable about a third axis, the handle being lockable in at least two angular positions about the third axis.
- The cooler apparatus set forth in claim 18, wherein the handle is lockable in
  a first position in which the handle is positioned upright and a second position in which the handle is positioned adjacent the base of the main body of the cooler.
  - 20. The cooler apparatus set forth in claim 19, wherein the handle is lockable in the second position to support the lid when the lid is in the second position.

25

10

15

25

30

21. A method for opening or closing a cooler, the cooler used for storing and insulating hot or cold items, the method comprising:

providing a main body of the cooler that defines a storage cavity having an open end;

providing a lid coupled to the main body;

moving the lid between a first position in which the lid substantially covers the open end of the storage cavity and a second position in which the lid does not substantially cover the open end of the storage cavity; and

maintaining the lid in a substantially horizontal position during movement of the lid between the first position and the second position.

- 22. The method set forth in claim 21, further comprising positioning at least one article on an upper surface of the lid, and moving the lid between the first position and the second position with the at least one article positioned on the upper surface of the lid during movement of the lid between the first position and the second position.
- 23. The method set forth in claim 21, further comprising:

  providing an arm positioned to couple the lid to the main body, the arm

  comprising a first portion pivotally coupled to the main body and a second portion
  pivotally coupled to the lid, and

rotating the first portion of the arm about a first axis and the second portion of the arm about a second axis during movement of the lid between the first position and the second position.

24. The method set forth in claim 23, further comprising revolving the second portion of the arm about the first axis during movement of the lid between the first position and the second position.

20

25

25. The method set forth in claim 21, further comprising:

providing a handle coupled to the main body of the cooler, the handle being rotatable about a third axis,

rotating the handle about the third axis between a first position in which the handle is upright and a second position in which the handle is positioned adjacent a base portion of the main body of the cooler, and

locking the handle in at least one of the first position and the second position.

- 10 26. The method set forth in claim 25, wherein locking the handle in the second position allows the handle to support the lid when the lid is in the second position.
  - 27. A cooler for storing and insulating hot or cold items, the cooler comprising: a main body;
    - a storage cavity defined in the main body and having an open end;
  - a lid coupled to the main body and positionable to substantially cover the open end of the storage cavity;

a handle coupled to the main body, the handle being rotatable about a first axis and lockable in at least two positions with respect to at least one of the main body and the lid, the handle comprising a first portion pivotally secured to the main body and a second portion coupled to the first portion and adapted to be grasped by a user.

- 28. The cooler set forth in claim 27, wherein the handle is lockable in a first position in which the second portion is upright and positioned to be grasped by a user for carrying and a second position in which the second portion is adjacent a base portion of the main body of the cooler.
- 29. The cooler set forth in claim 27, wherein the lid is movable between a first position in which the lid substantially covers the open end of the storage cavity and a second position in which the lid does not substantially cover the open end of the storage cavity, the lid positioned substantially horizontally in movement between the first position and the second position.

- 30. The cooler set forth in claim 29, wherein the handle is positionable in the second position to support the lid when the lid is in the second position.
- The cooler set forth in claim 27, wherein the first portion of the handle
   comprises an inner surface that at least partially defines an aperture, the inner surface further defining a plurality of grooves.
  - 32. The cooler set forth in claim 31, further comprising a knob located adjacent the main body and dimensioned to be received in the aperture of the first portion of the handle, the knob comprising an engagement tooth extending outwardly from an outer surface of the knob, the engagement tooth positioned to engage any of the plurality of grooves defined in the inner surface of the first portion of the handle to lock the handle in the at least two positions.

20

33. The cooler set forth in claim 32, wherein the knob is movable toward and away from the main body of the cooler along the first axis between a first position in which the engagement tooth is engaged with any of the plurality of grooves defined in the inner surface and a second position in which the engagement tooth is free from engagement with any of the plurality of grooves defined in the inner surface.